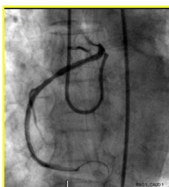



PCI for CTO Lesion

1 : For guiding catheter back up
Anomaly artery



2 : Retrograde PCI of CTO with Reverse CART
Capture Technique



Case Summary. We showed two cases of CTO lesions. First case showed a usefulness of Guideliner catheter to make a strong back up as one of the mother-child technique. And 2nd case illustrates a novel approach to completing wire externalization and provides a further indication for the role of the Guideliner™ catheter in treating CTOs.

TCTAP C-080

An Antegrade CTO Case Successfully Treated with the Aid of Rotational Coronary CT Angiogram

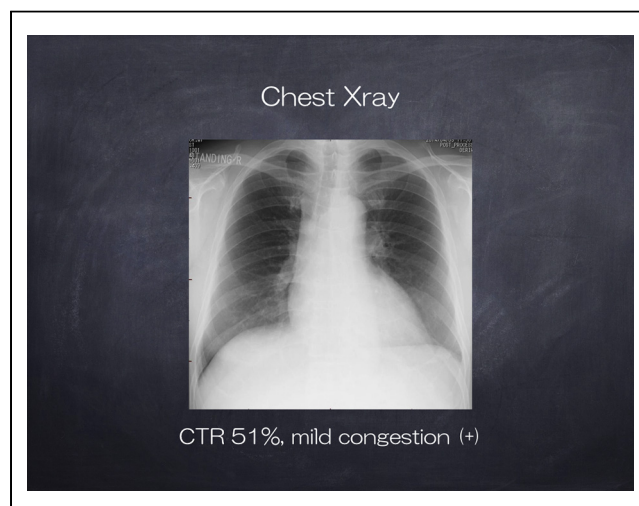
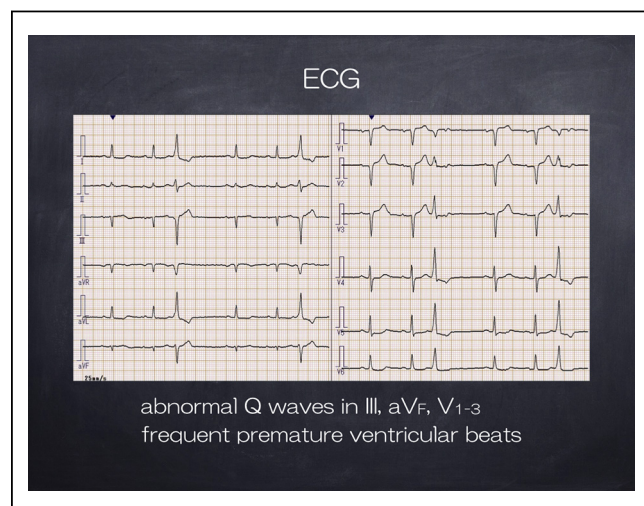
Katsuyuki Hasegawa,¹ Satoru Otsuji,¹ Yorihiro Higashino¹

¹Higashi Takarazuka Satoh Hospital, Japan

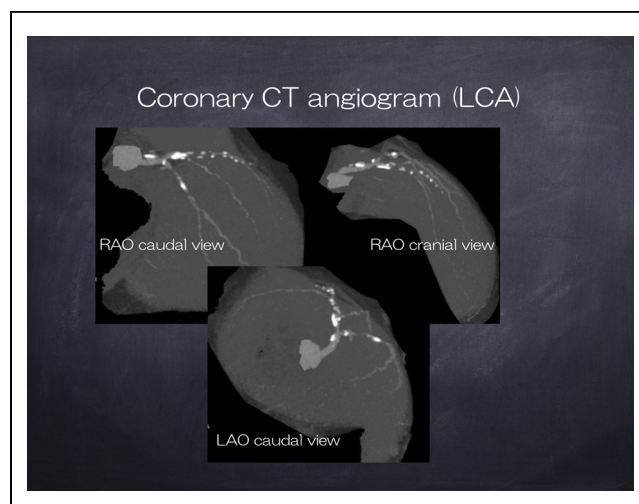
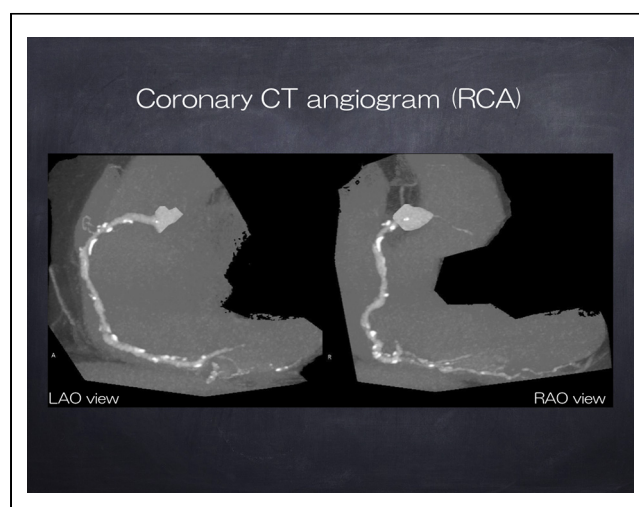
[CLINICAL INFORMATION]

Patient initials or identifier number. 86029

Relevant clinical history and physical exam. A 65-year-old man presented to our hospital complaining of effort-induced angina. He was prescribed diabetes mellitus, hypertension, and dyslipidemia for several years. The ECG showed abnormal Q wave in the leads III, aV_F, and V₁₋₃, and frequent ventricular premature beats. The chest Xray demonstrated mild congestion.

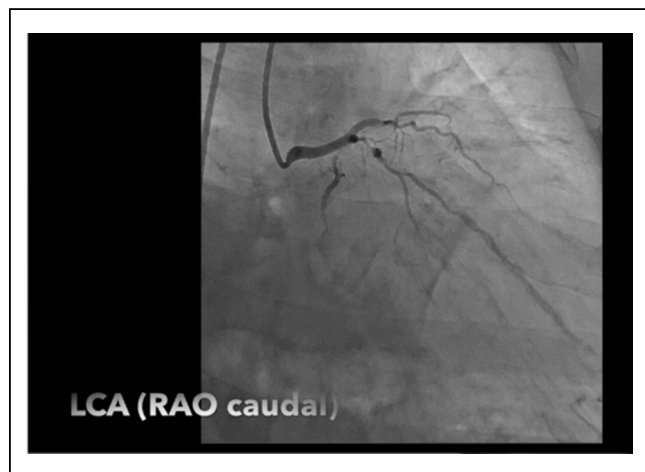


Relevant test results prior to catheterization. The echocardiography demonstrated decreased motion of his apical LV. Coronary computed tomography angiography indicated three-vessel disease including CTO in the proximal LAD.



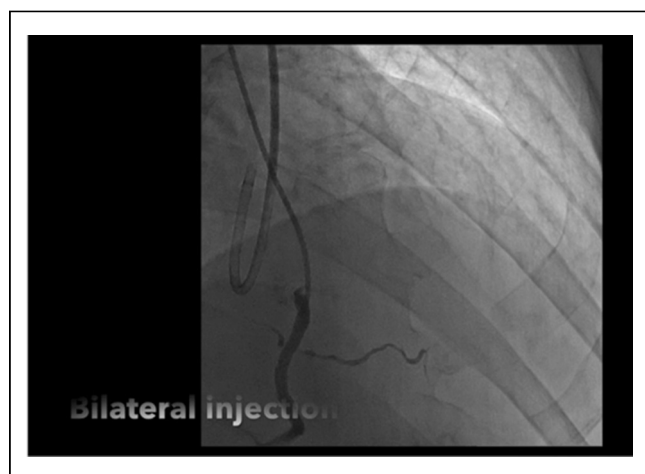
Relevant catheterization findings. The coronary angiogram revealed severe three-vessel disease including chronic total occlusion in the

proximal LAD. The blood flow of distal LAD was provided from the RCA and bridge collateral.



[INTERVENTIONAL MANAGEMENT]

Procedural step. First, angioplasty of the RCA was performed, and three drug-eluting stents were implanted in the proximal to mid-part of the RCA. Next, percutaneous coronary intervention to the chronic total occlusion in the proximal LAD was performed. The GAIA first wire with the support of Corsair catheter was advanced. From the RAO cranial view, the wire tip appeared to be in the good direction. However, the rotational angiogram revealed the discrepancy between the wire tip and the distal target from the RAO caudal view. The rotating plane was determined by the aid of rotational coronary CT angiogram. Parallel wire technique was performed using a GAIA second guide-wire. The GAIA second was advanced upward of the first wire from the RAO caudal view, although in the similar direction from the RAO cranial view. The second wire successfully got into the distal target. After dilating the occlusion by IKAZUCHI 2.0mm balloon, a drug-eluting stent (Resolute Integrity 2.5x26mm) was implanted and the procedure was completed. Four month after the procedure, good patency of the LAD was confirmed by coronary angiogram and the cardiac function became improved.



TCTAP C-081

CTO Lesion with Strong Bend Using Enhanced Hydrophilic Coating Floppy Guidewire from Retrograde Approach

Shingo Hosogi,¹ Takashi Nishimoto,¹ Hiroaki Matsumi¹

¹Kochi Health Sciences Center, Japan

[CLINICAL INFORMATION]

Patient initials or identifier number. AN

Relevant clinical history and physical exam. Case was 56 years old, male.

In 6/1/2014, pre-operative cardiac echo for bladder cancer revealed LV dysfunction (EF38%) and asynergy at inferior and posterior wall.

In 7/1/2014, CAG showed chronic total occlusion (CTO) lesion at RCA#3.

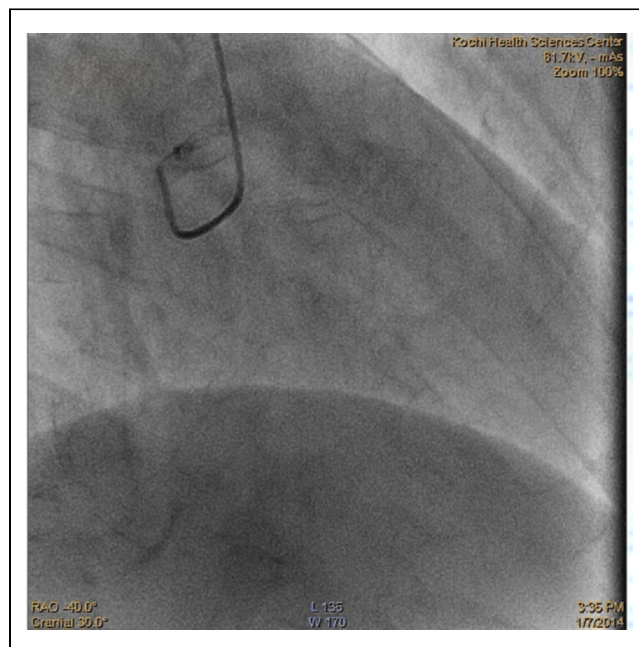
In 8/1/2014, successful and curable operation was done for bladder cancer.

In 20/2/2014, PCI was performed for RCA#2CTO

His coronary risk factors were hypertension and past smoker.

Relevant catheterization findings.

- ① Long CTO lesion from RCA#2 to RCA#3
- ② Visible micro-channel from the point of RV branch bifurcation with strong bend (not sure true or not)
- ③ Promising collateral channel via septal branch for retrograde approach
- ④ CTO exit is Abrupt type from retrograde approach



Case Summary. In the procedure of CTO intervention, parallel wire technique is one of the essential skills to improve antegrade success rate. Rotational angiogram is necessary to visualize the discrepancy between the first wire and the distal target. However, the ideal rotating plane is sometimes difficult to determine. Rotational coronary CT angiogram gives us helpful information about the ideal plane for the rotational angiogram. In this case, CTO in the proximal LAD was successfully treated with the aid of rotational coronary CT angiogram.